

Application No. 09/846,499
Amendment dated November 2, 2005
Reply to Office Action dated June 2, 2005

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of claims in the application.

Claims 1-51. (Cancelled).

52. (Previously Presented) In an ad-hoc, peer-to-peer radio system comprising a series of radio terminals, each said radio terminal comprising transceiver means for transmitting and receiving signals from other like terminals of said series of terminals, computer means, and memory means for storing program software means therein, said radio system based on time-dependent messaging having multiple parallel data channels and a control channel, the method comprising:

- (a) establishing a permanent link between a source terminal and a destination terminal or gateway;
- (b) transmitting data from said source terminal to the destination;
- (c) establishing a temporary link between said source terminal and said destination when the data being transmitted by said source terminal surpasses a predetermined limit for said permanent link.

Application No. 09/846,499
Amendment dated November 2, 2005
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53. (Previously Presented) The method according to claim 52, wherein said time-dependent messaging is made up of a series of time frames with each time frame having a plurality of time slots, said step (c) comprising utilizing at least three said time frames.

54. (Previously Presented) The method according to claim 52, wherein said permanent link comprises a plurality of said radio terminals, said method further comprising:

(d) controlling the power of transmission of each said radio terminal of said permanent link;

(e) said step (d) comprising achieving a relatively stable state wherein each terminal of said plurality of terminals of said permanent link stabilizes at a power level reflective of the relative path loss between it and other terminals of said permanent link.

55. (Previously Presented) A method of reducing the energy consumption in an ad-hoc, peer-to-peer radio system comprising a series of radio terminals, each said radio terminal comprising transceiver means for transmitting and receiving signals from other like terminals of said series of terminals, computer means, and memory means for storing program software means therein, said radio system based on time-dependent messaging having multiple parallel data channels and a control channel, the method comprising:

(a) controlling the power of transmission of each said radio terminal of a service group of said terminals; and

Application No. 09/846,499

Amendment dated November 2, 2005

Reply to Office Action dated June 2, 2005

(b) said step (a) comprising creating a relatively stable power-level state wherein each terminal of said plurality of terminals stabilizes at a power level reflective of the relative path loss between it and other terminals of said permanent link.

56. (Previously Presented) The method according to claim 55, wherein said step (b) comprises:

(c) applying a power-perturbation to said service group of terminals to cause at least some of said terminals to adjust the power level to a lower value.

57. (Previously Presented) The method according to claim 55, wherein said time-dependent messaging is made up of a series of time frames with each time frame having a plurality of time slots, said step (c) comprising applying said perturbation in the same time frame on all said terminals of said service group.

58. (Currently Amended) The method according to claim 55, wherein said time-dependent messaging is made up of a series of time frames with each time frame having a plurality of time slots, said step (b) comprising utilizing at least three said time frames for achieving stabilized transmit power.